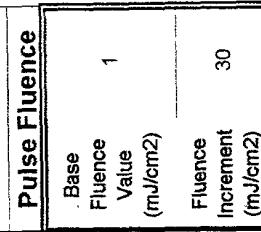
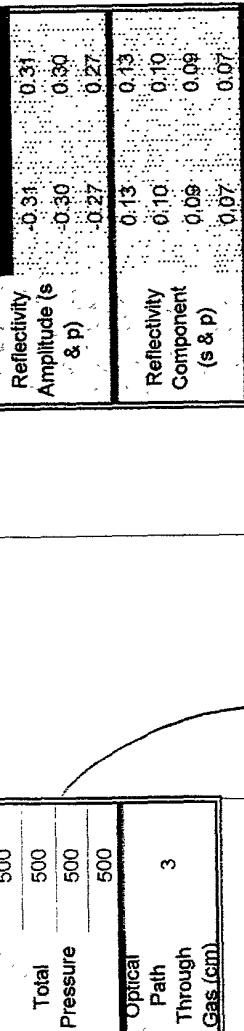
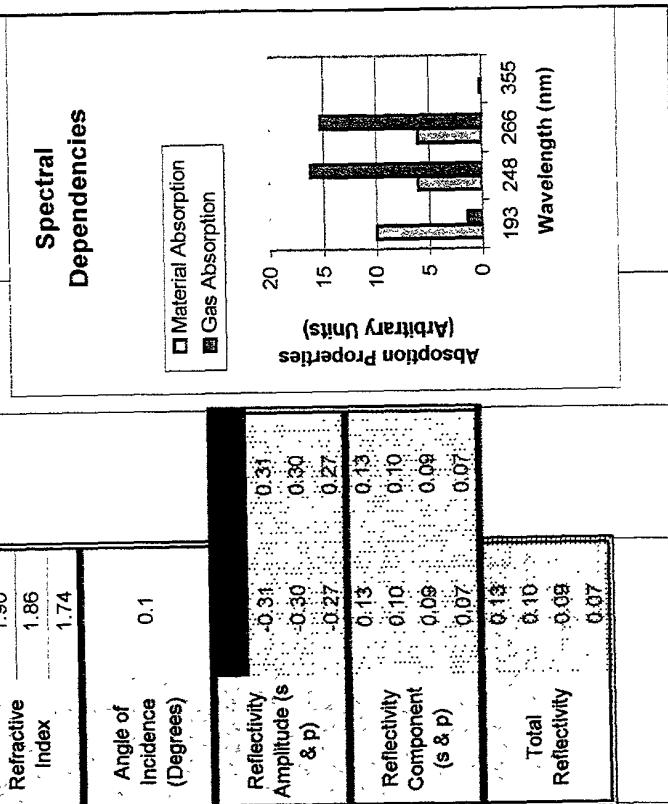
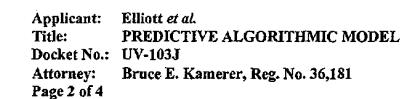


UVTech Systems Inc., PhotoChemical Ablation Model

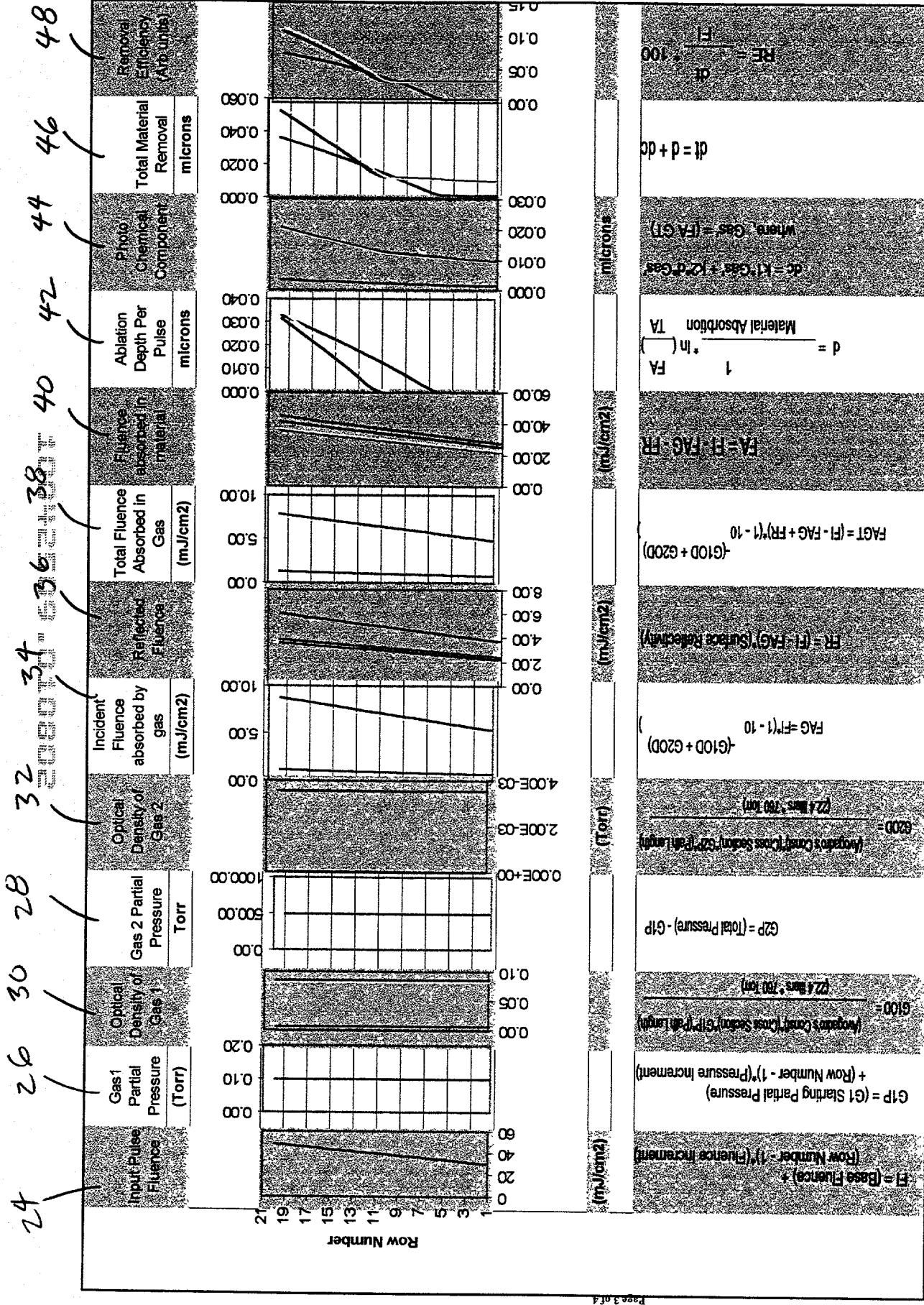
Case Definition		Gas Parameters				Pulse Fluence	
Removed Material	AZ 2400 Photo Resist	Starting Partial Pressure (Torr)	Partial Pressure Increment (Torr)	Molecular Cross Section ($\times 10^{-20}$ cm)			
Reactive Gases	Ozone + Oxygen	1	1	67.50			
Reactive Gases	Gas 1 (Ozone)	1	0	810.00			
Reactive Gases	Gas 2 (Oxygen)	1	0	762.75			
Reactive Gases	other	499	0	0.00675			
Laser Wavelength (nm)	193	499	0	0.0000675			
Laser Wavelength (nm)	266	499	0	0			
Laser Wavelength (nm)	355	499	0	0			
Total Pressure	500	0	0	0			
Optical Path Through Gas (cm)	3	0	0	0			
Base Fluence Value (mJ/cm ²)	1	0	0	0			
Fluence Increment (mJ/cm ²)	30	0	0	0			



60

20

1-17 62. -2



193 nm

Row Number	(mJ/cm2)	(Torr)	(Torr)	(mJ/cm2)	(mJ/cm2)	microns	microns
	Gas 1 Partial Pressure		Gas 2 Partial Pressure	Incident Fluence absorbed by gas	Total Fluence Absorbed in Gas	Ablation Depth Per Pulse	Total Material Removal
20	1.00	499.00	90.78	85.99	0.439	1.367	
19	1.00	499.00	86.01	81.47	0.434	1.304	
18	1.00	499.00	81.24	76.95	0.428	1.241	
17	1.00	499.00	76.47	72.44	0.422	1.178	
16	1.00	499.00	71.70	67.92	0.416	1.116	
15	1.00	499.00	66.93	63.40	0.409	1.054	
14	1.00	499.00	62.16	58.88	0.401	0.992	
13	1.00	499.00	57.39	54.36	0.393	0.930	
12	1.00	499.00	52.62	49.85	0.385	0.868	
11	1.00	499.00	47.85	45.33	0.375	0.806	
10	1.00	499.00	43.08	40.81	0.365	0.744	
9	1.00	499.00	38.31	36.29	0.353	0.682	
8	1.00	499.00	33.55	31.78	0.340	0.619	
7	1.00	499.00	28.78	27.26	0.324	0.556	
6	1.00	499.00	24.01	22.74	0.306	0.491	
5	1.00	499.00	19.24	18.22	0.284	0.424	
4	1.00	499.00	14.47	13.70	0.256	0.353	
3	1.00	499.00	9.70	9.19	0.216	0.274	
2	1.00	499.00	4.93	4.67	0.148	0.171	
1	1.00	499.00	0.16	0.15	0.000	0.000	

1516, 4